

THE JULY RARA MEETING IS A PICNIC!

Len Crellin, KC2PCD - RARA Secretary

Gary Skuse, KA1NJL – RARA Vice President

This year the first Friday in July happens to be the 4th, Independence Day. At the April meeting our members acknowledged that it is important for us to celebrate that holiday with our families and friends rather than attend a RARA meeting. Consequently they agreed that we will instead hold the July “meeting” at the annual picnic. That sounds like a good idea to us. Hot dogs, hamburgers, numerous member-provided sides and lots of rag chewing about all things including some talk about radio.

This year the picnic will be held on Saturday July 12th and the location is once again the Stewart Lodge at Mendon Ponds Park. If you haven't been to any of our events, like the annual picnic or the Winterfest, it is high time to join us. If you have been to those events in the past, please join us again for this year's picnic. If you are unfamiliar with the park you can find a map here, <http://www2.monroecounty.gov/files/parks/MendonPark.pdf> . The grill gets ready around noon and the burgers and hots will be ready soon after that but of course you are welcome to get there early to enjoy the day and each other's company. We will be setting things up around 11am.



We invite you to bring a dish to pass so we can have a real buffet to choose from. In the past we have been impressed and sometimes amazed by your culinary creativity and overall cooking skills. Please take this opportunity to share those skills with our other members.

If there are any announcements to make we will try to keep the “meeting” part very brief. If you would like to bring a radio and antenna, feel free to provide some operating positions, maybe you can even start your own tailgate flea market in the parking lot. Also consider bringing along your favorite picnic games or table games and don't hesitate to take part in good old rag chewing. Fun is strongly encouraged.

Please spread the word that there is no meeting at the fire hall on July 4th; we're afraid you'll need to buy your own donuts that night. And, of course, if you would like to help make this event happen you can contact either of us or any board member and we will be sure to appease your need to help with some tasks that will benefit everyone. As always, this is going to be fun.

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PREZ SEZ

Bill Marinucci, WB2GHC – RARA President

This month's edition of the RARA RAG will be published just a few days before Field Day 2014. There is still time to make plans to take part in the many Field Day activities in this area. Make it a family outing, get on the air, and most importantly, have FUN!

I got my July QST the day before I composed this column. The cover highlights the ARRL Centennial Convention that is coming up in July. One hundred years is a huge milestone, especially for ham radio. Ham radio has survived many challenges it has faced over those years. There are so many facets to ham radio, everything from technical expertise and experimentation, to providing vital public service, especially in emergency situations. The hams are usually the first to get a chain of communication going immediately following a disaster. NOAA relies on ham radio operators to be weather spotters as part of the Skywarn system. The military recognizes the value of having trained ham radio operators by its support of the various branches of MARS (Military Auxiliary Radio System). Even NASA thought enough about ham radio to have stations on the space shuttles and on the ISS. Let's just say that it is out of this world, hi hi.

Equally as important, ham radio has also fostered a brotherhood throughout the world and it provides the means to talk throughout the world as well. For the most part, hams from all countries are friendly, non-political, and respectful of other hams. When the Cold War was in full swing, ham radio operators from both the USSR and the USA put our differences aside to share signal reports and chat about station equipment, antennas, band conditions, and of course, the weather. I know that I was a little nervous when I worked my first Russian dx station! I was 14 years old at the time, but I still remember it vividly. Were the Feds going to arrest me? Well, that didn't happen!

I was fortunate enough to travel to several foreign countries in Europe, Central, and South America. I had the opportunity to meet many hams while there, and the camaraderie that was shown was most enjoyable. A German ham and his family took me to an Oktoberfest that was one real good time... good food, plenty of celebration, and of course, German beer. I had a blast, and I am not even German... Hams are easily found, just look for the antennas! There is a bond with fellow ham radio operators that is global, one of good will and friendship. How many other hobbies provide that?

The importance of ham radio is exactly why there is a RARA, a club of, by, and for ham radio operators, and those that want to join its rank. This club has a long history of being in service to the amateur radio community by offering license classes, public services, monthly meetings, and a host of other benefits to our membership. Our meetings focus on topics that are both informative and beneficial, as well as a time to have some face to face conversations. The RARA RAG is one of the best monthly ham radio 'newspapers' around today. Our traditions must continue. We must grow our ranks, involve more of the younger generation, and change with the times. Change is difficult, especially for the older generation who are mostly set in their ways. But most do adapt!

My deepest and sincere thanks to those of you who have volunteered to take on various positions on the Board and to help in RARA activities!

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CALENDAR OF EVENTS

June 28 & 29th – Field Day

JULY 9TH - RARA Board of Directors
5:30 PM RIT Engineering Hall, Room 2110

JULY 12TH - RARA Picnic

September 13th – Thrill Before The Chill
7AM – Noon Damascus Shriners, Bay Rd, Webster

September 20th – RARA VE Testing
10:00 AM RIT Gleason Hall, 9-3139

RARA BOARD OF DIRECTORS ELECTION REVISITED

Ross Mazzola, KC2LOC

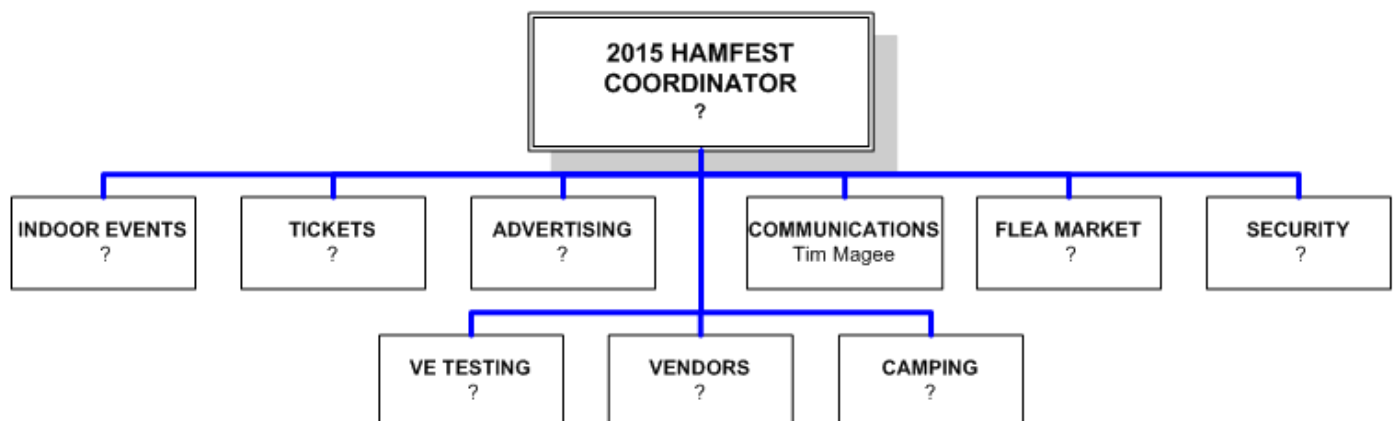
I am happy to report that eleven dedicated RARA members have responded to our plea to fill leadership positions in our club. Eight of those individuals have stepped forward to volunteer to serve on the Board of Directors in the fall. Two others have submitted their requests to be nominated for the positions of Secretary and Treasurer and another individual is contemplating running for Vice President but is not 100% sure yet. Together with four current Board members who are seeking re-election, it looks like we should have a full complement of Directors. While this is all very good news, we still need a few more people to commit themselves to the Officer positions of Vice-President and President. **Without these two slots being filled, RARA cannot and will not function.** Previous RARA RAGs have explained the roles and responsibilities for club President and Vice-President but allow me to summarize these positions in an effort to encourage a few of you to submit your names as soon as possible to the nominating committee.

The President opens the monthly RARA meeting and leads the Board of Directors. If you enjoy interacting with people and are fairly organized, the role of club President is one that you should consider. The Vice-President performs a role that is just as important to our club but in a slightly different way. Besides assisting the President with his or her duties, the VP is the one that solicits interesting presenters and topics for our club meetings. A couple of our meetings are already taken care of such as "Old Timer's Night" and our popular "RARA Auction" so the VP would just need to talk to some of the many talented individuals in our club and in our community and ask them to talk about a subject or to demonstrate something at one of our monthly meetings that might appeal to the membership. And it doesn't even have to be strictly amateur radio related! So if you have some thoughts about what you'd like to see or learn about at our RARA meetings, why not become Vice-President and make those ideas become reality?

It looks like we will have a strong group of candidates for election to the Board of Directors. We still need a commitment to run for President and Vice President. This is a critical need. If you are interested, let one of the current club Officers or Board members know that you are interested by submitting a short biography and telling them that you are willing to run for Office.

RARA 2015 HAMFEST TEAM CAPTAINS

For a successful Hamfest in 2015 we need volunteers for all of these positions.



THE THRILL BEFORE THE CHILL

Len Crellin, KC2PCD & Jim DiTucci, N2IXD

Can't find that special part you've been looking for? Perhaps you have been promising yourself to move some things to a new home! This is the place where buyers and sellers can meet and work out better deals than Monty Hall!

Well, I think this may be right up your alley. RARA has once again joined with the Damascus Shriners to produce our fourth annual Fall Fest and Tailgate Party. The Shriners will provide a first class location with ample parking, indoor bathroom facilities, a separate area for larger vehicles and RVs, a large covered picnic area to eat in, and a large deck to rest after all that shopping.

If you're running late, there will be some breakfast food to fill up on. Then use that energy to walk around and buy some more gear!

This event will be on **Saturday, September 13, 2014** and will open at 7 AM for vendors and 8 AM for all others. It will go to around Noon. It is conveniently located off Rt.104 at 979 Bay Rd., Webster, N.Y. 14580.

Upon entering, the staff will ask for a **\$5 donation** that will all go to help fund the Shriners Hospital for Children. Please spread the word and don't miss your last local flea market for buying and selling ham radio supplies in 2014.

Come have fun and Help the Kids!!!

Hope to see you all there! 73.

VE TEAM INPUT

Ken Hall, W2KRH

We had 13 candidates resulting in 11 new Technicians and 2 new Extra licensees. Congratulations to all and many happy years in the hobby. I hope to see some of you upgrading this fall.

We are taking the summer off and will resume testing on Saturday September 20th at RIT in room 9-3139.

Have a GREAT summer and see you in the fall.

Frank Cuff	KD2GMW	T	Eric Sanford	KD2GND	T
Robert Hess	KD2GMX	T	Robert Speciale	KD2GNE	T
Deborah Koch	KD2GMY	T	Thomas Stojanov	KD2GNF	T
Dennis Koch	KD2GMZ	T	Patricia Webster	KD2GNG	T
Charles Moon	KD2GNA	T	Paul Getman	KD2FLA	E
Michael Necheles	KD2GNB	T	William Luss	KD2DYR	E
Christopher Olschewski	KD2GNC	T			

LOCAL HIGH SCHOOL STUDENTS LAUNCH THREE HIGH ALTITUDE BALLOONS WITH APRS TRACKING

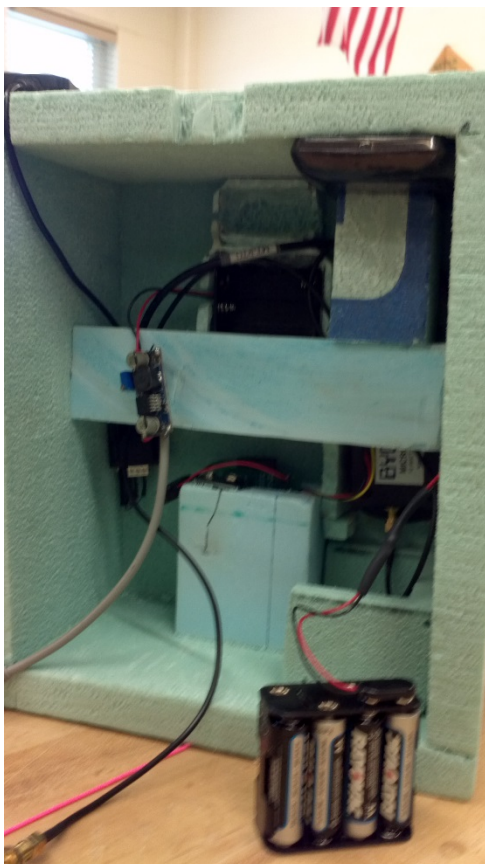
Jon Dickason, N2JAC



Filling The Balloons With Helium Takes About 1 Hour

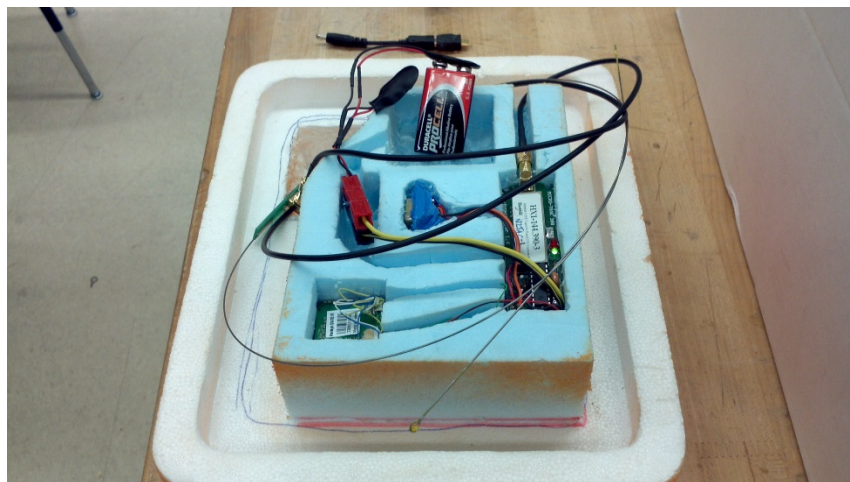
On Thursday May 29th, three high altitude helium balloons were launched from Pittsford-Mendon High School (PMHS) carrying APRS trackers with ham transmitters. The balloons were designed by students of Scott Banister and Chris Hurd, KD2GJE, technology teachers at Pittsford-Mendon and Cazenovia high schools respectively. Matt Jones, a Pittsford-Mendon Senior, led his student team building the payloads, designed to reach heights of 100,000 feet before bursting and parachuting back to earth. 2 payloads were built at PMHS, and one at Cazenovia. All carried various versions of Byonics' TinyTrak APRS trackers.

Cazenovia's flew a TinyTrak4 with a Baofeng UV-3R HT for weight savings. PMHS's were a TinyTrak Ready-To-Go, a combined TinyTrak and 10 watt transmitter, and a Micro-Trak 300, which is a TinyTrak with a 300 mW transmitter. The payloads were foam coolers to



Payload With 10 Watt Byonics RTG transmitters.

After the usual last minute delays, all three balloons lifted off together from the athletic field at PMHS. With each payload carrying multiple video cameras, they all had views of each other floating above the school grounds for a few minutes until disappearing into the



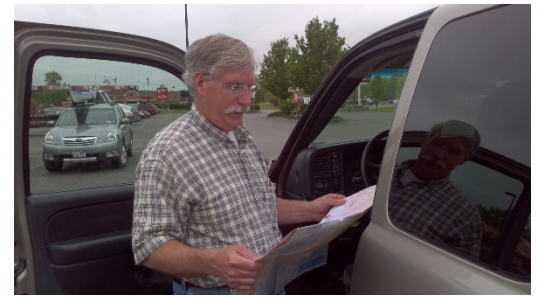
Payload Test of MicroTrak

protect the instruments from the 70 below zero cold of near-space and the shock of landing. Lithium batteries powered data recorders, cameras and



Launch Over Pittsford - 2 White Circles Are Balloons Viewed From 1st Balloon

low clouds overhead that day. Three teams of hams were ready to chase the balloons and recover the payloads. Steve, KA1CNF, used his Yaesu VX-8DR HT for mobile tracking while Dave, KC2DQS, navigated and monitored aprs.fi on his iPad. Rich, KD2ECF, with Bill, KA2WFJ, navigating, used his Kenwood D710 APRS mobile. Mr. Banister drove with me, N2JAC, navigating with my D710. Several other cars of students, teachers and parents shadowed the hams, staying in contact with FRS radios. The payloads also carried cell phones or SPOT trackers, and we followed those on our smart phones.

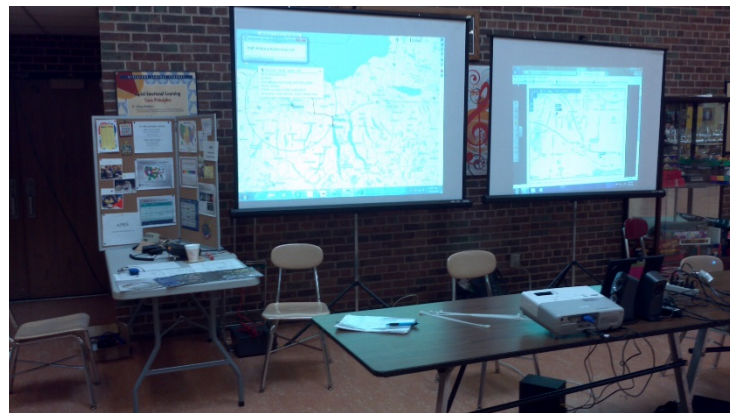


KA1CNF

Mission control at PMHS was manned by Bill, WB2SXY, who installed a J-pole on the roof the day before launch. Students at mission control displayed APRS and cellphone tracks with two projectors in the cafeteria, and Bill was able to relay location info to us while we were driving. We stayed on 145.11 for our non-directed voice net, and several curious hams checked in to ask questions about what was happening. Bill gladly told them what was 'up' and to look for N2JAC-



1, 9 and 11 on the web. A video conference link to Cazenovia let them share the action from mission control.



Mission Control

The three chase teams rendezvoused in Canandaigua while the Cazenovia balloon 9 ascended faster than the others and spiraled up above the Finger

Lakes. Over Seneca Lake it started picking up speed, at 47000 feet it reported a speed of 209 mph but then went silent for several minutes, instead of its programmed 30 second beacon. After 15 minutes of silence from the APRS transmitter while we panicked and thought about getting our passports as the balloon zoomed northwest toward Toronto, it beamed again from 59000 feet at 27 mph. After that GPS anomaly or jet stream ride, it was back to its leisurely pace and over Seneca Lake again. After another 90 minutes of floating up to 105,000 feet, the latex weather balloon that was 6 feet across on the ground had expanded to 27 feet and finally burst and the payload started coming down. The students looked at the falling altitude and 30 second APRS beacons and calculated that its speed was consistent with their projections, and the parachute had deployed properly. 1 and 11 were still ascending slowly toward Ithaca, so all the chase teams started heading towards 9's landing zone between Seneca and Keuka lakes (two teams brought boats for a water landing). If you haven't heard high school students describing their class as fun and awesome, a balloon chase is where you need to be.



WB2SXY



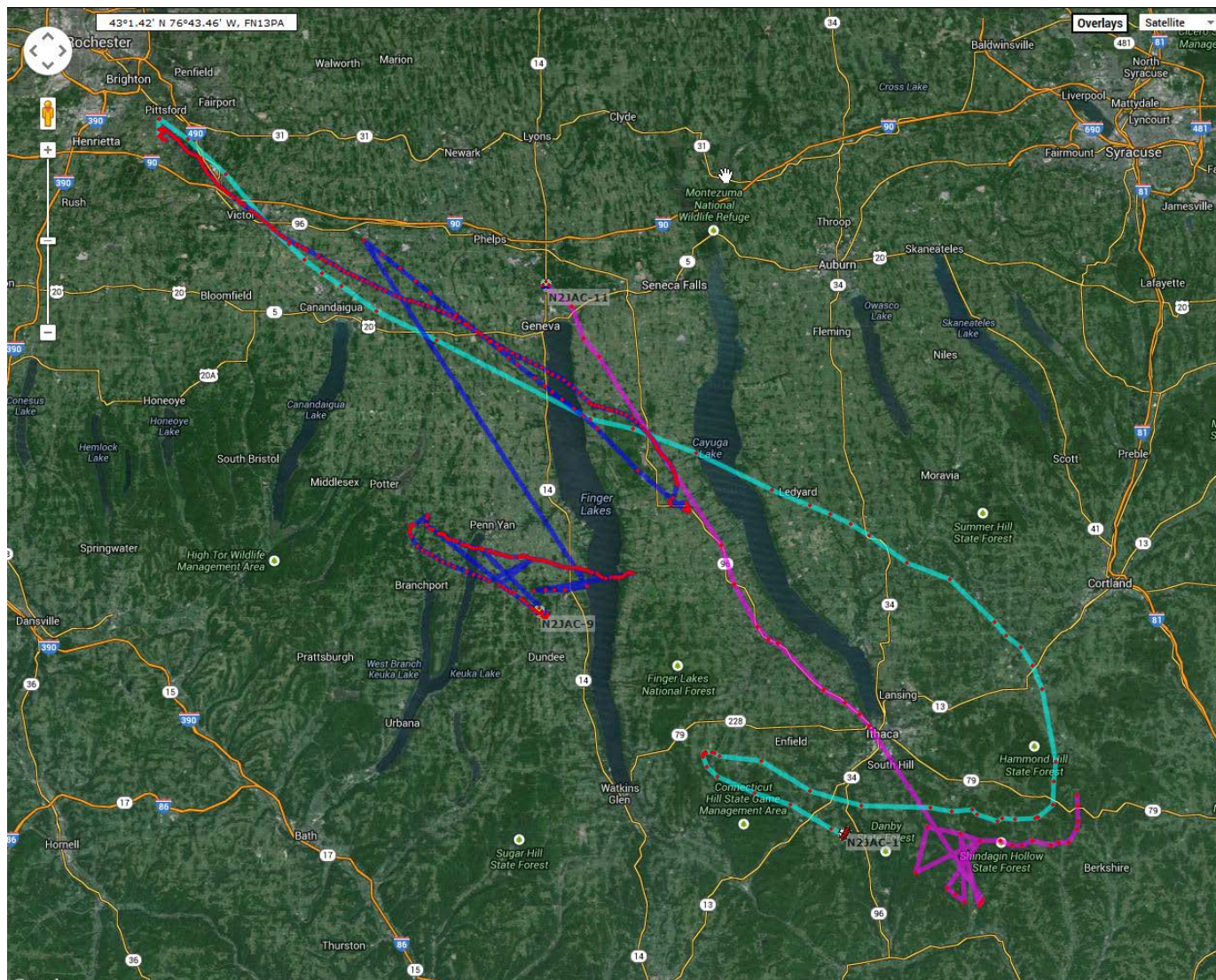
Garmin and D710

After zigzagging between the lakes, past wineries and horse drawn buggies, we were directed to a street address in Himrod from Jim, W2COP, who was monitoring our progress online. Arriving first on the street, Mr. Banister and I heard the payload's beacon and headed down a trail into the woods in his all wheel drive Subaru Forester, my D710 indicating it was on the ground a quarter mile off the road. I programmed my Garmin Geko GPS with the coordinates from the Kenwood, and Mr. Banister started following its arrow display through the woods. I had my Kenwood D7 portable showing me a distance and direction to the payload a couple tenths of a mile away. We split

up on a trail, but ended up at the same spot. Mr. Banister's GPS led him to within 30 feet of the payload, safely on the ground in a clover field, intact and still transmitting. The other teams met us there and shared high fives and photo ops with the Amish kids who were leading their cows around their farm and had curious good natured questions about why carloads of kids with kayaks on their roofs were stomping around their fields with gadgets. Mr. Banister has never been

geocaching before, but I told him it was like this, except the geocache usually isn't bright orange with a 3 foot parachute. I'm sure my foxhunting teammates can imagine a foxhunt with the transmitter starting at 20 miles up.

Before we left Sprout Hill Rd. I was receiving beacons from 1 and 11 so we started heading for Ithaca. 1 and 11 seemed to be ascending together, but over Canandaigua we heard from them much less frequently and we started to worry that we might not see them again, but as they came down they were beaconing fine. W2COP again gave us nearby street addresses and we stopped at the closest house with the gear indicating 1's payload a few tenths east. The homeowner said we could drive down her driveway, which we did until we came to a very protected field. It was fenced and gated and the crop looked very expensive and well tended. We carefully unlatched both gates to drive through and to the edge of some woods. It was then a short hike across a stream and this time I was following the Geko's arrow right to the payload in an old orchard.



Track of the Three Balloons

If you're following along on aprs.fi, the final coordinates may still show the payload on its way down to the ground. Close to the ground, the 300mW beacon wasn't received by the digipeaters and lgates to make it onto the web page. Once we got close enough, we were receiving the beacons directly from the payload on the ground. In 1's case, it was programmed to beacon frequently while it was moving, but only every 30 minutes if parked (this is called smart beaconing) so we had a tense 20 minutes of trying to get close to it in the car until we heard it's resting beacon and could go on foot.

11 had a similar trip down about 10 miles southeast of 1, only this time the students were ahead of the hams. It landed close to the road so the hike was short, but they still had to cross a stream and barbed wire to retrieve it, with the help of a friendly local girl who was happy to help the all-male student chase team.

The whole year long project was great fun for the hams, students and teachers. One of the teachers got his ham license before the launch, and he's already shopping for radios and more trackers for next year's balloons.

aprs.fi will have the location data for many months, so please check it out and get your trackers ready for next year's chase.

<http://aprs.fi/#!mt=roadmap&z=10&call=a%2FN2JAC-11%2Ca%2FN2JAC-1%2Ca%2FN2JAC-9&timerange=43200&tail=43200>

Video of highlights from Cazenovia's on-board cameras including slow motion of the balloon bursting.
<https://www.youtube.com/watch?v=SQ7S-ey-CX4>

Questions? n2jac@qsl.net



Cazenovia Students Ready To Launch



Teachers Scott Banister and Chris Hurd



Ascending Over Pittsford



Checking Cameras From Recovered Payload



Looking Straight Up At The Sun And The Balloon at 105,000 Feet



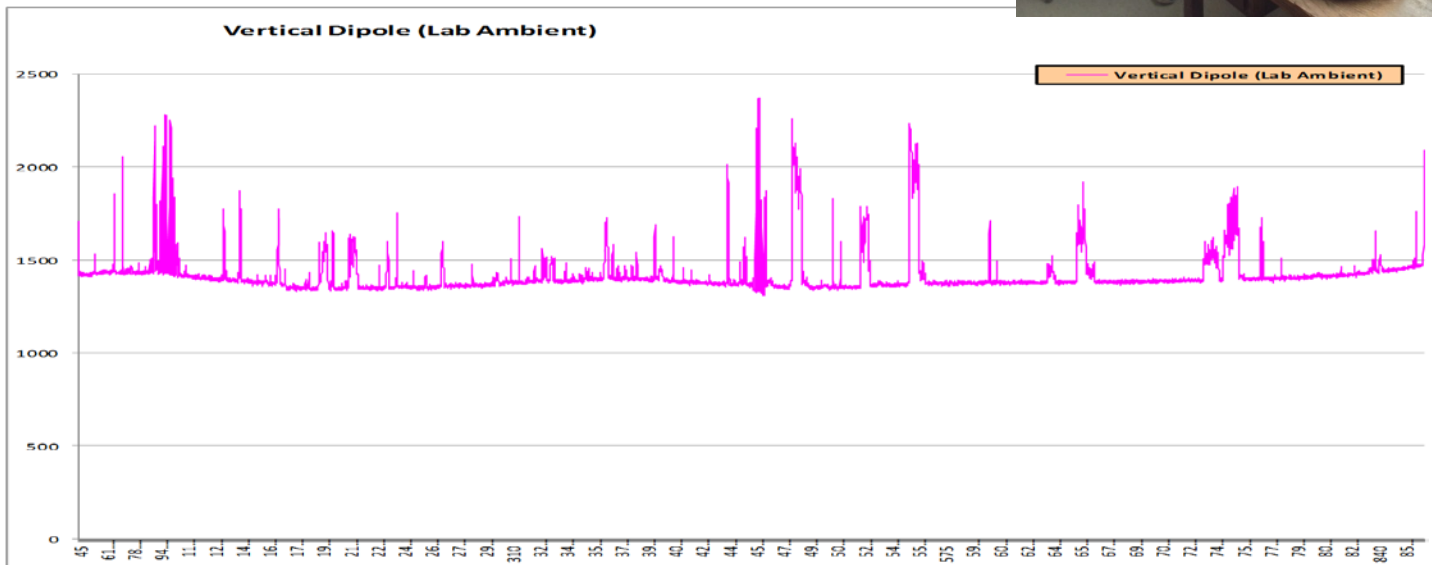
Approaching 105,000 Feet, Temperature Is -70 deg F

RADIO ASTRONOMY NEWS

Marty Pepe

Progress continues on our Radio Astronomy projects at a rapid pace. This month, the U of R team completed a base & rotary table for the Portable Radio Telescope (PRT), and had a dry run in the south end of parking lot 3. In the picture Nick C shows off his assembly work on a dish mounted on the new 'Lazy Susan' type mount. It's a solid bearing that yields better than 2° degree resolution. The mount consists of a circle whose circumference is 36 inches; a metal tape measure is fixed to the outside edge. Every inch equals 10 degrees! It's easy to measure to less than $\frac{1}{2}$ inch ($<5^\circ$) resolution. Besides being used with the PRT to find geosynchronous satellites, it doubles as an accurate rotary mount for when we sample the RF environment in Ionia for the Solar Spectrograph. This allows us to not only find the offending frequencies, but also tell in which direction they're originating from.

We've succeeded in sampling RF data in the lab and you can see that the lab environment isn't too quiet. This will have to do for now, until we can relocate some equipment to Ionia. The last picture shows the fall 2014 U of R Radio Telescope development team (1st row; Surrendra, Nick, Sara, Jamie, Janet, 2nd row Marty, Eric)



Please look forward to our next installment when we'll share characterizing Low Noise Amplifiers (LNAs), and the results of our demonstrations at the NEAF Solar Star Party. Our escapades continue - this summer we'll actually be able to start doing real field tests in Ionia.



2014 RARA PUBLIC SERVICE

Joe Walker, KA8WJH

RARA volunteers have completed two events since the last newsletter. The Sehghunda Trail Marathon and the American Diabetes Association Tour de Cure. This was the first year for the Sehghunda Trail Marathon which RARA supported in Letchworth Park. Thanks to the following volunteers for their support of the Marathon:

WB2PAY	Tim Brown
KD2GHG	Tom Clegg
N2JAC	Jon Dickason
KC2NCI	Tom Sanders
KA8WJH	Joe Walker

RARA largest public service event is the Tour de Cure. The Tour de Cure requires a significant amount of effort and coordination from our membership. A thank you to the RIT Radio Club for their technical and physical support of this event. A thank you to Charlie Escriva and Jim Stefano for their coordination of all the volunteers. Thanks to the following who volunteered to support the command center, SAG vehicles and rest stops for the 2000 riders who raised approximately \$1 million for the ADA:

K2DWA	Dave Avery	K2YA	Joe Hood
AE2M	Barry Blake	KC2SPY	Max Kelley
WB2PAY	Tim Brown	KS2JEK	Jon King
KC2YMQ	Bill Burdick	KD2FXV	Scott Koelle
KD2GHC	Thomas Clegg	KC2VJU	Dawn Lepard
KD2EHQ	Steve Coppola	KC2LOC	Ross Mazzola
KD2GHD	Kevin Cosgrove	WB2JOR	Leopold Morelli
N2OYG	Jim Dermody	KD2EEP	Maryanna Mueller
KC2YSP	Sarah DeYoung	KD2GBN	Michael Necheles
AB2LI	Mark Dibelka	KB2EJZ	David Osofsky
N2JAC	Jon Dickason	KC2UES	Mark Pedersen
KD2FBI	Kira DiTucci	KB2NCI	Thomas Sanders
N2IXD	Jim DiTucci	WB2GGM	Norm Schrader
K3YJJ	Tina Eldred	N2EKR	Bill Shaw
KC3BFG	James Eldred	KB2WJZ	Vladimir Sidorov
KB2SOZ	Charlie Escriva	N2WZN	Kit Smith
KC2LPS	Jill Escriva	AB2OY	Larry Safford
K2STF	Stephen Fleming	W2COP	Jim Stefano
K2SI	Duane Fregoe	KD2DNO	William Tegtmeyer
KO4DX	Neil Gibson	W2DST	Dave Timmons
N2BNE	John VanGriethuysen	KA8WJH	Joe Walker
KC2EQU	Justin Grigg	N2UEE	Wynona Walker
AC2CC	Don Hammond	KC2SUE	Sue Waterstraat
KD2BEC	Aaron Herting	W2DEW	Dan Waterstraat
		KC2WM	Ed Wilkonski

The next RARA public service is the Genesee Valley Horse Trials in Geneseo, June 29th. If you like watching beautiful horses maneuver a cross country course, you'll enjoy this event. This is an excellent event for newly licensed amateurs or amateurs wishing to become active in public service. Unfortunately, it's Field Day weekend. We desperately need additional operators to support communications for the day. If you have the time for the GVHT or any of RARA public service events, please register at

http://www.rochesterham.org/public_service.htm or email PublicService@RochesterHam.org

Public service is excellent exposure for amateur radio with the public and is great for all amateurs to practice operating and preparing for an actual emergency.

As an incentive to volunteer, RARA also offers reward points for volunteering: 5 points for a 1/2 day, 10 points for a full day and 15 points for leading an event. Points may be used to purchase RARA items, renew your membership or attend the annual RARA banquet.

WEATHER RADIO SAME ALERT

Jim Sutton, N2OPS



Over 1000 stations on seven VHF high band frequencies provide alert protection for virtually any kind of disaster situation.

SAME VS 1050 HZ

Originally, weather alert radios were activated via a 1050 Hz tone with 1350 Hz for marine warnings. I remember many times having the alarm wake me up for a situation many miles away with no bearing on my location.

Now the area and message can be tailored to the specific location and desires of the individual. Messages come in both voice and text.

SAME ALERTS

Specific Area Message Encoder alerts are the ultimate in safety and convenience. Watches and warnings are issued via both the original 1050 Hz tone and the digital SAME format. Nearly all SAME radios have a digital display that continues to scroll the exact alert till it expires.

SELECT COUNTIES

Waking up to distant situations is a thing of the past. Users can program their weather alert radio for one or multiple counties. Situations can include where they have family, a place of business, etc.

Be sure the station you are hearing issues SAME alerts for your county. Do not assume a strong signal means the station services your area.

US, CANADA, TERRITORIES

SAME weather alerts are transmitted in the US, Canada, and territories. A search of the internet did not locate continuous weather radio anywhere else in the world.

WEATHER RADIO FEATURES

There is a full spectrum of features to be found in weather radios. Styles range from very professional to absurd.

- Backup batteries
- External antenna jack
- Auxiliary activation jack
- Crank power
- Alarm clock
- Skywarn Ham receive
- AM.FM receive
- External audio jack



RADIO QUALITY

Weather radio receive quality ranges from superb maximum range to almost non-existent, limited to a few miles from the transmitter. For most users an external antenna jack is a must.

ROCHESTER WEATHER RADIO STATIONS AND SAME CODES

COUNTY/CITY/AREA	SAME #	NWR TRANSMITTER	FREQ.	CALL SIGN	WATTS	REMARKS
Allegany	036003	Buffalo	162.550	KEB98	600	
Allegany	036003	Call Hill	162.425	WXN29	300	
Cattaraugus	036009	Buffalo	162.550	KEB98	600	
Cattaraugus	036009	Cattaraugus	162.425	WWG32	100	
Cayuga	036011	Ithaca	162.500	WXN59	1000	
Cayuga	036011	Rochester	162.400	KHA53	500	
Cayuga	036011	Syracuse	162.550	WXL31	1000	
Genesee	036037	Buffalo	162.550	KEB98	600	
Genesee	036037	Rochester	162.400	KHA53	500	E 1/2
Livingston	036051	Call Hill	162.425	WXN29	300	
Livingston	036051	Rochester	162.400	KHA53	500	

Monroe	036055	Rochester	162.400	KHA53	500	
Monroe	036055	Spencerport	162.525	WNG539	300	
Ontario	036069	Mt. Washington	162.450	WXN55	300	
Ontario	036069	Rochester	162.400	KHA53	500	
Ontario	036069	Syracuse	162.550	WXL31	1000	E
Orleans	036073	Buffalo	162.550	KEB98	600	
Orleans	036073	Rochester	162.400	KHA53	500	
Schuyler	036097	Elmira	162.400	WXM31	1000	
Schuyler	036097	Ithaca	162.500	WXN59	1000	
Schuyler	036097	Mt. Washington	162.450	WXN55	300	
Seneca	036099	Elmira	162.400	WXM31	1000	SW
Seneca	036099	Ithaca	162.500	WXN59	1000	
Seneca	036099	Mt. Washington	162.450	WXN55	300	
Seneca	036099	Rochester	162.400	KHA53	500	
Seneca	036099	Syracuse	162.550	WXL31	1000	
Steuben	036101	Call Hill	162.425	WXN29	300	
Steuben	036101	Elmira	162.400	WXM31	1000	E
Steuben	036101	Mt. Washington	162.450	WXN55	300	
Wyoming	036121	Buffalo	162.550	KEB98	600	
Wyoming	036121	Call Hill	162.425	WXN29	300	
Wyoming	036121	Rochester	162.400	KHA53	500	E 1/2
Yates	036123	Elmira	162.400	WXM31	1000	S
Yates	036123	Ithaca	162.500	WXN59	1000	
Yates	036123	Mt. Washington	162.450	WXN55	300	
Yates	036123	Rochester	162.400	KHA53	500	N 1/2

EAS Event (NWR-SAME) Codes

Weather-Related Events	NWR-SAME Code	Status
Blizzard Warning	BZW	Operational
Coastal Flood Watch	CFA	Operational
Coastal Flood Warning	CFW	Operational
Dust Storm Warning	DSW	Operational
Flash Flood Watch	FFA	Operational
Flash Flood Warning	FFW	Operational
Flash Flood Statement	FFS	Operational
Flood Watch	FLA	Operational
Flood Warning	FLW	Operational
Flood Statement	FLS	Operational
High Wind Watch	HWA	Operational
High Wind Warning	HWW	Operational
Hurricane Watch	HUA	Operational
Hurricane Warning	HUW	Operational
Hurricane Statement	HLS	Operational
Severe Thunderstorm Watch	SVA	Operational
Severe Thunderstorm Warning	SVR	Operational

Severe Weather Statement	SVS	Operational
Special Marine Warning	SMW	Operational
Special Weather Statement	SPS	Operational
Tornado Watch	TOA	Operational
Tornado Warning	TOR	Operational
Tropical Storm Watch	TRA	Operational
Tropical Storm Warning	TRW	Operational
Tsunami Watch	TSA	Operational
Tsunami Warning	TSW	Operational
Winter Storm Watch	WSA	Operational
Winter Storm Warning	WSW	Operational
Non-Weather-Related Events	NWR-SAME Code	Status
<i>National Codes-Required</i>		
Emergency Action Notification	EAN	Operational*
Emergency Action Termination	EAT	Operational*
National Information Center	NIC	Operational
<i>State and Local Codes-Optional</i>		
Avalanche Watch	AVA	Operational
Avalanche Warning	AVW	Operational
Child Abduction Emergency	CAE	Operational
Civil Danger Warning	CDW	Operational
Civil Emergency Message	CEM	Operational
Earthquake Warning	EQW	Operational
Evacuation Immediate	EVI	Operational
Fire Warning	FRW	Operational
Hazardous Materials Warning	HMW	Operational
Law Enforcement Warning	LEW	Operational
Local Area Emergency	LAE	Operational
911 Telephone Outage Emergency	TOE	Operational
Nuclear Power Plant Warning	NUW	Operational
Radiological Hazard Warning	RHW	Operational
Shelter in Place Warning	SPW	Operational
Volcano Warning	VOW	Operational
Administrative Events	NWR-SAME Code	Status

Administrative Message	ADR	Operational
National Periodic Test	NPT	Operational*
Network Message Notification	NMN	Operational*
Practice/Demo Warning	DMO	Operational
Required Monthly Test	RMT	Operational
Required Weekly Test	RWT	Operational

THE ULTIMATE WEATHER ALERT RADIO

As I began researching for this story, I looked at what was being offered on EBay and I found this gem. The Radio-Shack-12-519 features the following:

- Sensitivity equal to my best scanner.
- Ability to enter a 2-meter or 70 cm Skywarn frequency.
- AM / FM BCB reception.
- Alkaline or rechargeable backup battery option.
- Two alarm clock settings.
- BNC external antenna jack.
- Ability to activate an external device with the WX alarm.
- Station presets for each band.
- Alert when there is no weather signal.
- Enter SAME code by state and county or directly by number.
- Single or multiple counties.
- Day and night WX alarm volume settings.
- \$19.99 shipped.



See the links section below for contact information.

Station Listings

<http://www.nws.noaa.gov/nwr/nwrbro.htm>

Coverage Maps

<http://www.nws.noaa.gov/nwr/Maps/>

How SAME Works

<http://www.nws.noaa.gov/nwr/same.htm>

General Information

<http://www.nws.noaa.gov/nwr/geninfo.htm>

Environment Canada Weather Radio

<http://www.ec.gc.ca/meteo-weather/default.asp?lang=En&n=8830FA44-1>

Radio-Shack-12-519

<http://www.ebay.com/itm/231245020135?ssPageName=STRK:MEW NX:IT& trksid=p3984.m1439.l2649>

Radio-Shack-12-519 Manual

<http://www.manualslib.com/manual/137244/Radio-Shack-12-519.html>

Consumer Research Best Weather Radios

<http://www.consumersearch.com/weather-radios/best-weather-radios>

E Ham Weather Radio Reviews

<http://www.eham.net/reviews/products/76>

Weather Radio Yagi

<http://www.amazon.com/National-Weather-Service-Antenna-Connector/dp/B005GWZ37C>

In the next issue, we will look at weather radio DX and using weather radio as a tropo beacon. Until then 73 to thee.

MISCELLANEOUS

- Thank YOU to all who stepped up and volunteered to run for the RARA Board of Directors.
- BIO's for Board of Director candidates are due by August 15th for publishing in the September issue of the RAG. The September issue of the RAG will be available BEFORE the September 5th annual meeting. Come and vote. Send your BIO's to editor@rochesterham.org
- If you have not received your monthly RARA RAG email notice, check your email spam / junk mail filters and folders
 - Verify that your email address is correct in the Membership data base
- The July RARA meeting will be held at the RARA picnic on Saturday, July 12th
- FIELD DAY! – June 28 & 29
- Please Volunteer to HELP
 - Public Service – see the RARA web site
 - Picnic
 - Thrill Before The Chill
 - 2015 Hamfest Captians and Committee members
- Articles for the RAG are always needed and welcome
 - Technical Articles
 - Club projects
 - Ham Radio in the days of “olde”
 - If you did it – someone else will be interested in it
 - If you are concerned about writing an article, colaborate with a friend
- Suggest and volunteer to present topics for our monthly meetings
- Have you tried the Word Search?

Silent Key

Lester C. Cornmesser
KD2AVL
February 11, 2014

Silent Key

John A Remsen
W2ZHB
May 28, 2014

Silent Key

Elmer E. Wagner
W2BNJ
May 30, 2014

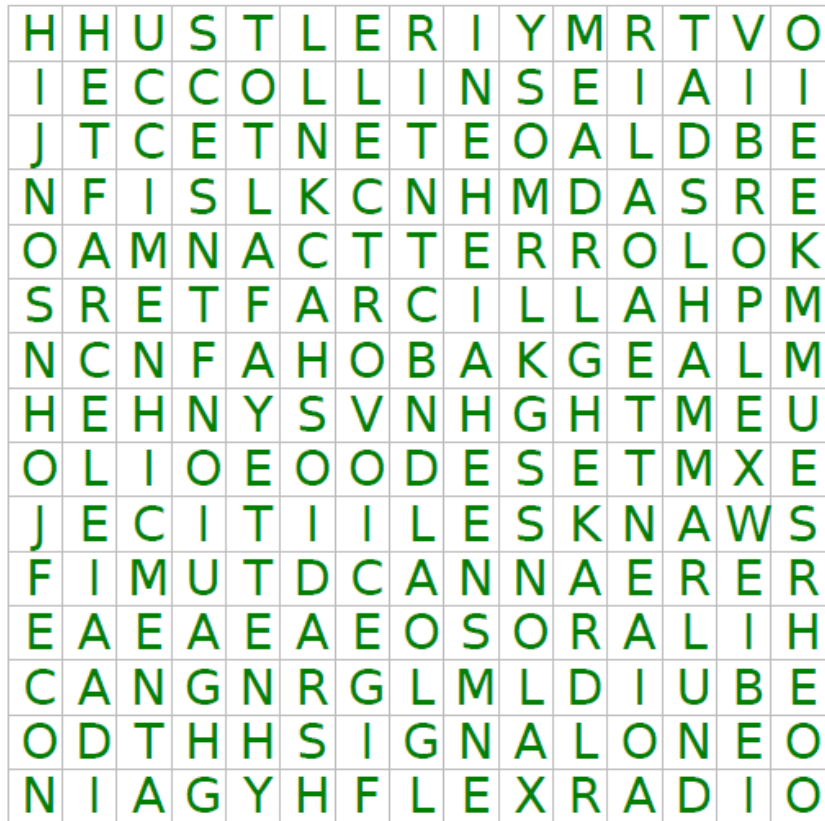
Silent Key

Clark S. Butler
KB2ZFA
December 4, 2013

BOARD OF DIRECTORS OFFICER'S RESPONSIBILITIES

Position	Responsibilities	Term Length and Limit
President	• Preside over all meetings of RARA and the Board of Directors. • Appoint committees and sub-committees. ◦ Serve as an ex-officio member of all committees. • Represent RARA in all official capacities. • Assure that all RARA by-laws are adhered to.	• One year term • Two consecutive terms
Vice President	• Organize programs for monthly RARA meetings. ◦ Identify, invite, and confirm speakers for the meetings. ◦ Invite Dick Goslee and Ed Gable to run the annual auction in November. • Assist at the annual auction by tracking items sold and prices paid. • Notify the Membership Secretary of membership points earned by members. • Write a monthly article for the RARA Rag describing that month's program. • Organize annual Winterfest.	• One year term • Three consecutive terms
Secretary	• Record all minutes of all meetings of the Board of Directors. • Record minutes at the annual membership meeting in September. • Keep physical and electronic records of all meetings during their term. • Retrieve all mail on a bi-weekly basis from the RARA P.O. Box. • Monitor newspapers for recent announcements in obituaries for Silent Keys. • Supervise the annual election.	• One year term • Three consecutive terms
Treasurer	• Pay via check at monthly RARA meetings for costs incurred for that meeting, including costs for refreshments and raffle items. • Collect and count the refreshment collection, as well as raffle ticket sales at the monthly meeting. • Collect any membership dues payments and submit membership information to the Membership Secretary. • Present reports at monthly Board of Directors meeting from Citizens Bank account and Quick Books Pro account information. • Record all debits and credits executed every month. • File Postcard form 990 with the IRS. • Prepare 'straw man' financial outlook for the next Fiscal Year. • File all paperwork on all financial transactions for the fiscal year. • Present annual financial report to the membership at annual meeting.	• One year term • Three consecutive terms

WORD SEARCH



AMECO
COLLINS
EIMAC
FLEXRADIO
HAMMARLUND
HYGAIN
MOSLEY
RLDRAKE
TENEC

BIRD
EFJOHNSON
ELECRAFT
GONSET
HEATHKIT
LAFAYETTE
NATIONALRADIO
SIGNALONE
VIBROPLEX

CLEGG
EICO
ELECTROVOICE
HALLICRAFTERS
HUSTLER
MFJ
RADIOSHACK
SWAN

The solution for this month's puzzle will be in the August, 2014 issue of the RAG.

This is the solution for the June 2014 puzzle.



NEWS FROM OTHER AREA CLUBS

MONROE COUNTY ARES / RACES NEWS

The Monroe County Amateur Radio Emergency Service, Inc. holds its meetings on the fourth Thursday of each month. Anyone interested, members and non-members, are welcome to attend.

REMINDER: We do not meet during the summer months of July or August.

The next ARES Meeting will be held on: **Thursday, September 25, 2014, at 7:00 PM.**

Meetings are held at the **Greater Rochester Chapter of the American Red Cross HQ, 50 Prince Street, Rochester, NY 14607.** (Located behind the Rochester Auditorium Theatre, 885 Main St. E.)



ARES NET: Monroe County ARES/RACES meets on the air every Thursday of the month at 9:00 pm, on the 146.61 MHz (-) 110.9 Hz PL repeater. The only exception to that are nights when we hold our regular meeting, generally on the 4th Thursday of the month.

WEB: www.monroecountyemcomm.org

NBEMS: Want to learn about Narrow Band Emergency Messaging System (NBEMS)? It's the latest and easiest way to "Go Digital!" Bring your laptop computer and 2-M handheld transceiver. We will conduct an NBEMS clinic after every meeting through 2015.

Field Day: Monroe County ARES/RACES will operate W2EOC for June 28 -29 Field Day activities. Set-up begins at noon and on-the-air operating begins at 2:00 PM Saturday, June 28, for 24 straight hours of operating fun. Participation is open and welcome to all Ham Radio operators and anyone else who wants to find out what Ham Radio is all about. Come for an hour. Come for 24 hours.

***** NEW LOCATION *****

2014 Field Day Location:

American Red Cross
West Henrietta Blood Donation Center
825 John Street
West Henrietta, NY 14586

Follow the Map:

<http://www.redcrossblood.org/locations/west-henrietta-blood-donation-center>

Last year we had three operating stations active throughout the weekend running voice, CW and digital modes. Bring your radio, antenna and comfortable operating chair for a casual Field Day event. New to Ham Radio? Bring a chair and we will get you on the air.

Keep up with the latest MCARES Field Day plans at:

<http://www.monroecountyemcomm.org>

<http://www.arrl.org/field-day>

ROCHESTER RADIO REPEATER ASSOCIATION, RRRRA

SQUAW ISLAND AMATEUR RADIO CLUB, SIARC

The Squaw Island Amateur Radio Club (SIARC) meets every second Wednesday of the month at 7:00PM at the Ontario County Safety Training Facility, 2914 County Road 48, Town of Hopewell. If we have VE testing we meet at 7:30PM with VE testing starting at 6:30PM.

The July meeting will be on July 9th at 7:00PM.

GENESEE VALLEY AMATEUR RADIO ASSN.

It is hard to believe that another year has passed and we are planning for Field Day again.

GVARA plans to set up for Field Day at Vitale Park, on Big Tree Road in Lakeville. Thanks to Sheriff Thomas Dougherty and Livonia Town Supervisor Eric Gott, we will be set up in the area of the Livingston County Sheriff's Sub Station.



We hope to be set up for license testing by 1pm. Testing will be from 1pm to 3pm. Our testing is thru ARRL and there is a \$15 fee to take the test. We hope to have at least 2 HF Rigs operating. Anyone who would like to stop is welcome to. We should have a grill going by 6pm for hots, hammy's, or whatever... Bring your own beverage and snack food.

I (Billy Boyd) would like to take a moment to thank RARA for their Amateur Radio Classes at RIT. I would like to thank my instructor, Roy Wildermuth W2IT. Without the classes and Roy's pushing, I would not have passed my test to upgrade to Extra on May 18th at GVARA's Test Session.

DRUMLINS AMATEUR RADIO CLUB

Our meetings are held the third Wednesday of each month. Doors open at 7:00pm, meeting starts at 7:30pm at the Wayne County EOC, 7376 Route 31, Lyons. VE sessions held before the meeting on even months. Talk-in before meeting on 146.685-.

ROCHESTER VHF GROUP

The Rochester VHF Group sponsors an informal On-Air Net on 144.260 USB every Monday Night at 2100 local, and a 6 Meter Net on Thursdays at 2100 local on 50.200 USB.

More information can be found by visiting www.rvhfg.org or just calling in any Monday or Thursday night. Give it a try!

Microwave Update 2014

The annual Microwave Update (MUD) conference will be held on October 24-25, 2014 in Rochester, NY.

The Rochester VHF Group (RVHFG) is hosting MUD 2014 at the Rochester Marriott Airport Hotel. Microwave Update is an annual technical conference and includes presentations by leading amateur radio microwave experimenters. Attendees from all over the world have the opportunity to discuss the latest technical developments and operating achievements taking place in the 902 MHz-and-up amateur radio frequencies. There will be test equipment for measurements including noise figure up to 47 GHz. The conference will conclude with the Saturday evening dinner banquet. For early arrivals on Thursday, there will be a tour at the nearby Antique Wireless Association (AWA) Museum.

For full details and registration, go to the Microwave Update2014 website www.microwaveupdate.org.

The call for papers and presenters also appears on the website.

ROCHESTER DX ASSOCIATION, RDXA

ARRL Field Day 2014 is just around the corner June 28th and 29th. Field day is an annual event that RDXA participates in. Again this year we will be setting up in Webster Park for the weekend. Setup will commence on Friday throughout the day and finish up any loose ends and final testing on Saturday morning.

RDXA, with the help of its membership and the local ham community, has been very successful in their Field Day efforts and looks to do the same this year.

There is a lot of behind the scenes work that goes into this event every year, but there is always room for more help. We would like to extend the hand to the ham radio community to come out and experience Field Day with RDXA. There are many ways this can be done; extra hands during set up are always welcomed. If you have ever been to an RDXA Field Day take a look around and you can see the amount of effort it takes to bring this event to life. This could be great hands on event for some of our newly licensed operators, from Yagi antenna assembly and erection to using an air cannon and putting up those dipoles. There is always something to be done and the fellowship is second to none. If you're not participating in Field Day in your own shack, or at another Field Day site but would like to get on the air please come out and participate with us.

RDXA would like to extend the hand to our newly licensed operators to come out and operate on the GOTA (Get On The Air) station. The GOTA station is designed for new operators or operators that are inactive. The 2014 Field Day event starts @ 2:00pm Saturday and goes until 2:00pm on Sunday. We look forward to seeing you in Webster Park, 999 Lake Rd., Webster. Head to the campground and follow the signs. If you need assistance finding us someone is always available on 145.11 to assist you.

FOR SALE

The following items are for sale by Roger Dennis WB2HWO

- 48' HBX Rohn tower already on the ground.
- 11 el 2m beam Cushcraft.
- 25' 2" mast
- HF vertical, Come & take a look at it.

Prices will be very reasonable.
Call 585-225-6392

THE AMATEUR'S CODE

Originally written by Paul M. Segal, W9EEA (1928)

THE RADIO AMATEUR IS:

CONSIDERATE	Never knowingly operating in such a way as to lessen the pleasure of others.
LOYAL	Offering loyalty, encouragement and support to other amateurs, local club, and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.
PROGRESSIVE	With knowledge abreast of science, a well built and efficient station and operation beyond reproach.
FRIENDLY	With slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.
BALANCED	Radio is an avocation, never interfering with duties owed to family, job, school or community.
PATRIOTIC	With station and skill always ready for service to country and community.

VISIT THE RARA WEBSITE!

Did you know that your club's website (www.rochesterham.org) offers these features and more?

- Photos of meetings & events (you might be in there!)
- Info on upcoming meetings/programs
- Rochester Hamfest information!
- Online membership & renewal
- Track and redeem your Reward Points
- Public service info & sign-up
- VE testing info
- Back issues of the *Rag* in PDF
- Officer contact
- List of past presidents
- Online membership directory
- Order RARA logo products
- Useful Internet links
- Ham Radio 101 – tons of tutorial info, plus net & repeater listings



RARA MARKETPLACE

Your commercial ad could be here! The RARA Rag can help spread the word on your business at very reasonable rates.
Contact us for details at editor@rochesterham.org.

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RARA OFFICERS

OFFICERS

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AUGUST RAG DEADLINE

JULY 15, 2014



**RARA meets at 7PM on the
first Friday of each month;
come join us at:**

Henrietta Fire Co. #1
3129 East Henrietta Road
Henrietta, NY 14467

Get Directions

ROCHESTER AREA RADIO CLUB CONTACTS

Antique Wireless Association (AWA)

Lynn Bisha, W2BSN: lbisha@rochester.rr.com

Drumlins Amateur Radio Club Ltd. (DARC)

Glen Bruemmer, KC2YGH: kc2ygh@yahoo.com

Fisherman's Net Amateur Radio Club

Jim Sutton, N2OPS: jim@otrym.org

Genesee Valley Amateur Radio Assn.

Bill Boyd, N3DSP: N3DSP@lafireline.net

Monroe County ARES

Jim DiTucci, N2IXD: n2ixd@arrl.net

Orleans County Amateur Radio Club (OCARC)

Terry Cook, K2EYS: k2eys@ocarc.us

Rochester Amateur Radio Association (RARA)

Bill Marinucci, WB2GHC wb2ghc@arrl.net

Rochester DX Association (RDXA)

Mark Hazel, K2MTH: mthazel2151@yahoo.com

Rochester Radio Repeater Association (RRRA)

Bob Shewell, N2HJD: bshewell@frontiernet.net

Rochester VHF Group (RVHFG)

John Stevens, WB2BYP: wb2byp@arrl.net

Squaw Island Amateur Radio Club (SIARC)

Steve Benton, WB2VMR: sbenton2@rochester.rr.com

XEROX Amateur Radio Club (XARC)

Ned Assam, W2NED: w2ned@frontiernet.com

THE RARA RAG

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